

## CLAIMS

We claim:

1. A method of multi-modal content delivery, the method comprising:  
establishing a session between a server and a client device;  
while in a state of the session, delivering content, formatted for a first presentation mode,  
to the client device, the content being associated with the state;  
storing a state record associated with the client device, the state record defining the state  
of the session;  
receiving a mode-switching signal from the client device; and  
in response to the mode-switching signal, continuing the session in the state by delivering  
the content, formatted for a second presentation mode, to the client device, wherein the second  
presentation mode is different from the first presentation mode
2. The method of claim 1, wherein the first presentation mode is a voice-based  
mode.
3. The method of claim 2, wherein the second presentation mode is a screen-based  
mode.
4. The method of claim 1, wherein the first presentation mode is a screen-based  
mode.

5. The method of claim 4, wherein the second presentation mode is a voice-based mode.

6. The method of claim 1, wherein delivering content, formatted for a first presentation mode, to the client device comprises:

receiving content in an original format from the server;

transcoding the content in the original format to provide the content, formatted for the first presentation mode; and

transmitting the content, formatted for the first presentation mode, over an air interface to the client device.

7. The method of claim 1, wherein delivering content, formatted for a second presentation mode, to the client device comprises:

receiving content from the server in an original format;

transcoding the content in the original format to provide the content, formatted for the second presentation mode; and

transmitting the content, formatted for the second presentation mode, over an air interface to the client device.

8. The method of claim 1, wherein the state record identifies the state of the session by identifying a navigation point, the navigation point identifying a specific resource available from the server.

9. The method of claim 8, wherein the navigation point is defined by a uniform resource identifier (URI).

10. The method of claim 8, wherein the state record includes a cache of content associated with the state, and wherein;

continuing the session in the state further comprises transmitting the cache of content to the client device.

11. The method of claim 1, further comprising:  
the client device transmitting the mode-switching signal over an air interface.

12. The method of claim 1, wherein the mode-switching signal includes a service request, the service request identifying the client device and the second presentation mode.

13. The method of claim 12, further comprising:  
in response to the service request, determining whether the client device is authorized to receive content formatted for the second presentation mode.

14. The method of claim 13, further comprising:  
in response to the service request, locating the state record associated with the client device.

15. A system for delivering content to a client device while the client device is in a session with a server, the system comprising:

a wireless access network for communicating with the client device over an air interface;  
a first presentation system for delivering content, formatted for a first presentation mode,  
5 to the wireless access network;

a second presentation system for delivering content, formatted for a second presentation  
mode, to the wireless access network; and

a session manager for transmitting content from the server to the first presentation system  
and to the second presentation system, the session manager storing a state record associated with  
10 the client device, the state record defining a state of the session.

16. The system of claim 15, wherein the session manager receives a service request  
from the client device, the service request identifying the client device and the first presentation  
mode, and wherein, in response to the service request, the session manager:

- a) retrieves the state record associated with the client device;
- 5 b) identifies the state defined by the state record;
- c) continues the session in the state between the client device and the server; and
- d) transmits content associated with the state from the server to the first presentation  
system.

17. The system of claim 15, wherein the service request identifies the client device  
and the second presentation mode, and wherein, in response to the service request, the session  
manager:

- a) retrieves the state record associated with the client device;
- 5 b) identifies the state defined by the state record;

c) continues the session in the state between the client device and the server; and  
d) transmits content associated with the state from the server to the second presentation system.

18. The system of claim 15, wherein the first presentation system includes a voice-command platform.

19. The system of claim 15, wherein the second presentation system includes a data service node.

20. The system of claim 15, further comprising an authentication server, wherein the session manager queries the authentication server in response to a service request from the client device.

21. For use in a network that includes at least a first presentation system and at least a second presentation system, a session manager for managing multi-modal content delivery, wherein content is initially transmitted to the first presentation system, the session manager comprising:

5 a processor;  
a memory;  
a network interface by which content from a network is receivable; and  
a mode-switching module of machine instructions stored in the memory, the mode-switching module being executable by the processor to initiate a switchover from the first

10 presentation system to the second presentation system in response to a mode-switching signal, wherein the content is then transmitted to the second presentation system.

22. The session manager of claim 21, further comprising:

a session state storage module of machine instructions stored in the memory, the session state storage module being executable by the processor to maintain a record of a session state, the session state defining the state of a user's session before the switchover; and

5 the mode-switching module being further executable by the processor to use the record to reproduce the user's session after the switchover.

23. The session manager of claim 22, wherein the record includes a navigation point, the navigation point identifying a specific resource available from the network.

24. The session manager of claim 23, wherein the record further includes data entered by the user prior to the switchover.

25. The session manager of claim 24, wherein reproducing the user's session includes transmitting, to the second presentation system, the data entered by the user prior to the switchover.

26. The session manager of claim 21, further comprising:

a transcoding module of machine instructions stored in the memory, the transcoding module being executable by the processor to transcode the content into a format compatible with the first or the second presentation system.

27. For use in a network that includes at least a first presentation system and at least a second presentation system, a session manager for managing multi-modal content delivery, wherein content is initially transmitted to the first presentation system, the session manager comprising:

5 a processor;

a memory;

a network interface by which content from a network is receivable; and

a session state storage module of machine instructions stored in the memory, the session state storage module being executable by the processor to maintain a record of a session state, the session state defining the state of a user's session before a switchover from the first presentation system to the second presentation system;

the record including a navigation point, the navigation point identifying a specific resource available from the network;

the record further including data entered by the user prior to the switchover;

15 a mode-switching module of machine instructions stored in the memory, the mode-switching module being executable by the processor to receive a mode-switching signal and to responsively initiate the switchover and transmit the content to the second presentation system, the mode-switching module being further executable by the processor to use the record to reproduce the user's session after the switchover;

20 wherein reproducing the user's session includes transmitting, to the second presentation system, the data entered by the user prior to the switchover; and

Year	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
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